

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for preparing chlorine by catalytic gas-phase oxidation of hydrogen chloride, which comprises the steps:

a) providing a feed gas stream I comprising hydrogen chloride and a feed gas stream II comprising oxygen;

b) in a first oxidation stage, feeding the feed gas stream I, the feed gas stream II, into a first oxidation zone and bringing them into contact with a first oxidation catalyst so that a first partial amount of the hydrogen chloride is oxidized to chlorine and a gas stream III comprising chlorine, unreacted oxygen, unreacted hydrogen chloride and water vapor is obtained;

c) in a second oxidation stage, feeding the gas stream III into a second oxidation zone and bringing it into contact with at least one further oxidation catalyst so that a second partial amount of the hydrogen chloride is oxidized to chlorine and a product gas stream IV comprising chlorine, unreacted oxygen, unreacted hydrogen chloride and water vapor is obtained;

d) isolating chlorine, from the product gas stream IV,
wherein the first oxidization catalyst in the first oxidation zone is present in a fluidized bed and the further oxidation catalyst or catalysts in the second oxidation zone is/are present in a fixed bed,

wherein the temperature in the first oxidation zone is from 280 to 360°C and that in the second oxidation zone is from 220 to 320°C,

wherein the oxidation catalysts comprise ruthenium oxide on a support selected from the group consisting of silicon dioxide, aluminum oxide, titanium dioxide and zirconium dioxide, and

wherein the hydrogen chloride conversion in the first oxidation stage is from 40 to 80%.

Claim 2 (Canceled).

Claim 3 (Previously Presented): The process as claimed in claim 1, wherein the second oxidation zone comprises only one fixed-bed reactor.

Claim 4 (Previously Presented): The process as claimed in claim 1, wherein the second oxidation zone has only one temperature zone.

Claim 5 (Canceled).

Claim 6 (Previously Presented): The process as claimed in claim 1, wherein step d) comprises the steps:

- d1) separating off hydrogen chloride and water from the product gas stream IV to give a gas stream V comprising chlorine and oxygen;
- d2) drying the gas stream V;
- d3) separating off an oxygen-containing stream from the gas stream V leaving a chlorine-containing product stream VI;
- d4) and purifying the chlorine-containing product stream VI.

Claim 7 (Previously Presented): The process as claimed in claim 1, wherein a stream Ia comprising hydrogen chloride is recycled into the first oxidation zone.

Application No. 10/567,579
Reply to Office Action of April 10, 2007

Claim 8 (Previously Presented): The process as claimed in claim 1, wherein a stream
IIa comprising oxygen is recycled into the first oxidation zone.

Claim 9 (Canceled).